REMARKS

Claims 1, 3, 5-7, 10-62 and 64-74 are pending.

The Examiner rejected Claims 1, 3, 5-7, 12-16, 18-21, 23-24, 28-29, 33, 36, 40-42, 44, 47, 51-53, 55, 57, 59, 61-62, 66, 68, and 71-74 under 35 U.S.C. § 103(a) as being unpatentable U.S. 6,587,789 ("Diggelen") in view of U.S. Patent 5,608,410 ("Stilp"). With respect to independent Claims 1, 36 and 59, the Examiner states:

> Regarding claims 1,36,59, Diggelen discloses a method and apparatus for locating mobile receivers using a wide area reference network for propagating ephemeris. Diggelen further discloses an information processing station (108 in Fig. 1) connected and accessible via a data network (see col. 4, lines 27-36), said information processing station having a database to store navigation information regarding satellites. Diggelen further discloses a receiving station (126 in Fig. 1) including a position system receiver and a transmitter, said positioning system receiver receiving position/navigation information from a positioning system and transmitting positioning information to said information processing station via a data link for storage at said database. Diggelen further discloses a mobile unit (118 in Fig. 1) including a positioning system receiver and a wireless receiver, said mobile unit receiving said positioning information from said information processing station via said data network using wireless communication. See col. 3, line 1- col. 4, line 36.
>
> However Diggelen fails to disclose a method wherein the information processing station connected to and accessible via a data network, stores differential correction data.
>
> Stilp, in the same field of endeavor, teaches a method wherein the information processing station connected to and accessible via a data network, stores differential correction data. See col. 15, lines 44-60.
>
> Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teaching of Stilp to store differential correction data in Diggelen's invention in order to acquire position information from GPS satellites and accurately determine the position of the mobile unit in order to avail the location dependent services.

Applicants respectfully traverse the Examiner's rejection. As the Examiner agrees,

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Diggelen fails to disclose storing differential correction data at an information processing station. At Stilp's col. 15, lines 44-60, on which the Examiner relied for his rejection, Stilp discloses merely a timing subsystem in which GPS receivers located at antenna sites use differential corrections:

> In one preferred embodiment, the timing subsystem includes a GPS receiver located at each antenna site location. The GPS receiver is preferably a differential receiver capable of correcting for changes in ionospheric or atmospheric conditions and GPS satellite movements. Preferably, the GPS receiver always outputs a pulse that is within 10 nanoseconds of a pulse that is output by another GPS receiver located at any of the other antenna site locations within a given system. The differential corrections may be accomplished through prior knowledge of the GPS satellite epherimides and current ionospheric conditions and by using standard algorithms to calculate corrections. Alternatively, the corrections may be accomplished through the transmission of a second signal such that the GPS receiver can discriminate and determine perturbations in the primary GPS signal versus the secondary signal and then calculate corrections.

Stilp uses the differential corrections to generate timing pulses (See, for example, Stilp's col. 15, lines 34-43). Thus, the combination of these teachings of Diggelen and Stilp does not meet the limitations of Claim 1. Specifically, Claim 1 recites that the information processing station stores differential correction data which is accessed over a data network by the mobile receiver and processed by the mobile units to compute a measured position:

> 1. (Currently amended) A positioning information distribution system comprising:
>
> an information processing station connected to and accesssible via a data network, <u>said information processing station having a database for storing navigation information regarding satellites in a positioning system and differential correction data</u>;
>
> a plurality of receiving stations each including a positioning system receiver and a transmitter, said positioning system receiver receiving navigational

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messages from one or more of said satellites in said positioning system and transmitting said navigation information extracted from the navigational messages to said information processing station via a data link for storage at said database; and

a mobile unit including a positioning system receiver and a data processing unit, said mobile unit receiving positioning signals from a subset of satellites being in line-of-sight of said mobile unit and communicating with said data network using wireless communication, wherein said mobile unit processes said positioning signals and said navigation information and differential correction data obtained from said information processing station over said data network to compute a measured position of said mobile unit.

(emphasis added)

The above-underscored limitations are neither disclosed nor suggested by Diggelen or Stilp. As explained, for example, at page 7, lines 12-27 of Applicants' Specification, such a system allows mobile GPS receivers to determine their position even when the satellite signals to the GPS receivers are obstructed. The Examiner's hindsight reconstruction, not only not meeting the limitations of Claim 1, provides no such attendant benefits of Claim 1. Thus, Applicants respectfully submit that the Claim 1, and its dependent Claims 3, 5-7, 12-16, 18-21, 23-24, 28-29, 33 are each allowable over the combined teachings of Diggelen and Stilp. Claims 36 and 59, and their respective dependent Claims 40-42, 44, 47, 51-53, 55, 57, 61-62, 66, 68, and 71-74 are likewise allowable over the combined teachings of Diggelen and Stilp. Reconsideration and allowance of Claims 1, 3, 5-7, 12-16, 18-21, 23-24, 28-29, 33, 36, 40-42, 44, 47, 51-53, 55, 57, 59, 61-62, 66, 68, and 71-74 are therefore requested.

The Examiner rejected Claims 17, 25-27, 38-39, 43, 52, 60, 65, and 67 under 35 U.S.C. § 103(a) as being unpatentable over Diggelen and Stilp, in view of U.S. Patent 6,222,483 ("Twitchell"), the Examiner citing Twitchell for teaching triangulation not taught

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in Diggelen and Stilp. Applicants respectfully traverse the Examiner's rejection. As each of Claims 17 and 25-27 depend from Claim 1, the combined teachings of Diggelen, stilp and Twitchell under the Examiner's construction neither disclose nor suggest the system of Claim 1, as discussed above. Thus, Claims 17 and 25-27 are each allowable over the combined teachings of Diggelen, Stilp and Twitchell. Similarly, Claims 38-39, 43 and 52, each depending from Claim 36, and Claims 60, 65 and 67, each depending from Claim 59, are each allowable over the combined teachings of Diggelen, Stilp and Twitchell. Reconsideration and allowance of Claims 17, 25-27, 38-39, 43, 52, 60, 65, and 67 are therefore requested.

The Examiner rejected Claims 10-11, 30-35, 45-46, and 69-70 under 35 U.S.C. § 103(a) as being unpatentable over Diggelen and Stilp, in view of U.S. Patent 6,583,756 ("Sheynblat"), the Examiner citing Sheynblat for teaching satellite health information not taught in Diggelen and Stilp. Applicants respectfully traverse the Examiner rejection. Each of Claims 10-11, 30-35, 45-46 and 69-70 depends from one of Claims 1, 36 and 59, and thus are allowable over Diggelen and Stilp for the reasons stated above. Thus, Claims 10-11, 45-46 and 69-70 are each allowable over the combined teachings of Diggelen, Stilp and Sheynblat. Reconsideration and allowance of Claims 10-11, 30-35, 45-46 and 69-70 are therefore requested.

The Examiner rejected Claims 37 and 64 under 35 U.S.C. § 103(a) as being unpatentable over Diggelen and Stilp, the Examiner taking official notice that the scope of the claimed invention is unchanged by changing the number of GPS satellites from 28 satellites to 24 satellites. Because Claims 37 and 64 depend from Claims 36 and 59, respectively, each of Claims 37 and 64 are allowable over Diggelen and Stilp for the reasons already stated above with respect to Claims 36 and 59. Reconsideration and allowance of Claims 37 and 64 are therefore requested.

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The Examiner rejected Claims 22 and 56 under 35 U.S.C. § 103(a) as being unpatentable over Diggelen in view of Stilp, even though neither Diggelen nor Stilp teaches the use of a T1 link for the data link. The Examiner instead takes official notice that a T1 link is a landline. Because Claims 22 and 56 depend from Claims 1 and 36, respectively, each of Claims 22 and 56 are allowable over Diggelen and Stilp for the reasons already stated above with respect to Claims 1 and 36. Reconsideration and allowance of Claims 22 and 56 are therefore requested.

For the foregoing reasons, Applicants submit that all pending claims (i.e., Claims 1, 3, 5-7, 10-62 and 64-74) are each allowable over the prior art of record. Reconsideration and allowance of these claims are respectfully requested. If the Examiner has any questions regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicants at 408-392-9250.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 5, 2005.

Attorney for Applicant(s) — Date of Signature: 8/5/2005

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